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# TWO SOUTH AMERICAN ACRIDID GENERA WITH OLD WORLD AFFINITIES (ORTHOPTERA)

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Generic classification of Acrididae has developed independently in the New and the Old World and entirely disconnected systems are used in both. While it may be considered that the time for a world-wide revision of genera has not yet arrived, it appears useful to call attention to some cases when a study of New World genera in relation to those known from the Old World reveals interesting relationships which remain unnoticed until such direct comparison is made. These cases should serve as a reminder to students of systematics that it is at least unwise to rest content with determining genera by the aid of keys dealing with one particular fauna and disregarding related forms occurring in other parts of the world.

Genus **Aulacobothrus** I. Bolívar.

1900. **Stirapleura** L .Bruner, Second Rep. Merch. Locust Invest. Comm., p. 22 (Not **Stirapleura** Scudder, 1876).
1902. **Aulacobothrus** I. Bolívar, Ann. Soc. Ent. France, LXX, p. 597.
1909. **Phorenula** I. Bolívar, Trab. Mús. Cien. Nat. Madrid, ser. Zool., N.º 20, p. 55.
1927. **Scyllinops** Rehn, Trans. Amer. Ent. Soc., LIII, p. 228 **(syn. nov.)**.

The synonymy of the Indian genus *Aulacobothrus* and African *Phorenula* has been discussed by me some time ago (Trans. Ent. Soc. London, 1926, p. 430), and now I have to record the conclusion that the South American genus, incorrectly called *Stirapleura* by L. Bruner and later on described by Rehn under the name *Scyllinops*, cannot possibly be regarded distinct from *Aulacobothrus*. This conclusion is based on a careful comparison of South American species including the genotype of *Scyllinops* (*Stirapleura bruneri* Rehn) with the numerous African and Indian species of *Aulacobothrus*. The comparison shows that no difference that might be considered of generic value can be found between the Old World and the New World species. The genotype of *Scyllinops*, which is *S. bruneri* (Rehn), if found in Africa would have been included into *Aulacobothrus* without any hesitation. The only character of apparent generic value my be found in the shape of the posterior margin of female subgenital plate which in that species and in *pallida* Bruner is strongly trilobate. This character is included by Rehn into generic diagnosis but it is very little pronounced in *signatipennis* (Blanch.), *humilis* (Blanch.), *variabilis* (Brun.) and *obscura* (Brun.) which all belong to *Scyllinops* according to that author, while on the other hand, a decidely trilobate subgenital plate is observed in *Aulacobothrus luteipes* I. Bol. of India. If this single character is given generic value, then the last named species, and probably some other African and Indian members of *Aulacobothrus*, should be removed to *Scyllinops*. In my opinion, there is no reason to regard this character as of more than specific value, and this view is apparently shared by Rehn who includes into *Scyllinops* species with differently shaped subgenital plate.

The distribution area of the genus *Aulacobothrus*, in its extended limits, occupies all savanna regions of Africa and India, with one or two outlying species in Southern China, as well as the pampas of South America, particularly of Argentina and Chile (it appears not impossible that the Mexican *Sc. salina* Brun. belongs to a distinct genus, though I have not seen specimens of it). Such a type of generic distribution does not represent anything very unusual, but evidences a considerable antiquity of the genus.

Genus **Aucacris**, Hebard, 1929.

During Mr. Hebard's visit to the British Museum some years ago, I pointed out to him a curious Chilean Acridid which he undertook to study at muy request. He eventually described it as representing a new genus which he placed in the subfamily Cyrtacanthacrinae (Catanto-

pinae), under the name *Aucacris* (Entom. News, XL, 1929, p. 253). Two years later, Willemse described second species of the genus, *Aucacris hebardi* (Mitt. deutsch. Ent. Ges., 2, 1931, N.º 2, p. 22). An examination of the genotype, *Aucacris eumera* Hebard, convinced me that its subfamily assignment should be rectified. The only reason for referring *Aucacris* to Catantopinae is the presence of a well developed prosternal tubercle which many authors consider as an infalible character of that subfamily. Actually this is not the case and examples are known when the tubercle may be absent in some species of a Catantopine genus (e. g. *Dericorys*), while on the other hand tendencies to the development of it are (e. g. *Arcyptera*), as well as in Pamphaginae and Oedipodinae (*Thrinchus, Phrynotettix,* etc.). On the other hand, the structure of the head in *Aucacris* is definitely of non-Catantopine type, owing to the development of the carinae delimiting a hexagonal fastigium of vertex, and particularly because of the presence of very distinctly defined foveolae of vertex. This type of vertex is exactly such as observed in some Batrachotetrigini (e. g. *Prionotropis*) and perhaps in certain Pamphaginae, but not in Catantopinae.

A still more decisive proof that *Aucacris* does not belong to Catantopinae consists in the presence in that genus of a well developed stridulating plate at the antero-inferior angle of the second tergite. This plate is characteristic of Batrachotetrigini and most Pamphaginae and I not hesitate to include *Aucacris* into the first named group, with which it has so much in common in the structure of the head.

The assignment of *Aucacris* to Batrachotetrigini is of considerable zoogeographical interest, since that group can be considered as a very ancient one. This conclusion is based on the strongly discontinuos distribution of its representatives which occur in Australia, South Africa, Palaearctic deserts, south-western North America, Mexico and the deserts of Chili. This, or similar, kind of distribution is known for some other desert animals and plants, and its existence suggests that the origin of the highly specialised desert fauna and flora goes back, perhaps, beyond the Tertiary period.